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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,310	06/24/2003	Alan J. Janis	13958/YOD ITWO:0062	9058

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EXAMINER

NICHOLSON, ERIC K

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 03/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/602,310	JANIS ET AL.	
	Examiner	Art Unit	
	Eric K Nicholson	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26-30 is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-25 and 31-35 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9, 11-17, 19-25 and 31-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 1,793,015 to Roos in view of U.S. patent 5,924,744 to Eberle. The Roos connector teaches a body 8 having an integrated bearing structure 14. A first member 15 pivotably coupled to the body via the bearing pins 14 and being at least partially supported by the integrated bearing structure and a second member 18 coupled to the first member 15 via a camming surface formed by the unnumbered pin in the slot or hole of the first member 15, the slot or hole being arcuate, wherein pivotal actuation of the first member 15 (compare figs. 2 and 3) in a direction tangential to the body 8 directs axial translation of the second member 18 from a first position (fig. 2) to a second position (fig. 3). However, the Roos connector is not disclosed to be used as an air flow connector for aircraft. Eberle discloses that it is known in the art to

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provide a similar type coupling with body 64A, first member 64 pivoted to the body and second member 32 connected to the first member to connect two air flow members 26,30 of an aircraft.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the connector of Roos to connect air flow conduits in an aircraft such as taught by Eberle, since both connectors are equivalent in the manner of operation and the material flowing through the connectors is insignificant to the determination of patentability of the structure of the connector being claimed. As to claims 3-5, 9, 21,22 as noted above the second member 18 coupled to the first member 15 via a camming surface formed by the unnumbered pin in the slot or hole of the first member 15, the slot or hole being arcuate and having first and second positions on either side of the hole. As to claim 6, the second member 18 includes a clamping portion 19, As to claim 7 the clamping portion 19 connects to member 7 which corresponds to member 28 of Eberle which as noted above is connected to an aircraft, see column 1, lines 10-25. As to claims 13 and 14, note fig. 5 which shows a plurality of assemblies on either side of the body. As to claim 16 the slot includes a locking portion when the in the over center position as noted in lines 90-95. As to claim 24 see seal 12 which is seated between the body 8 and the connecting portion 1 which as noted above forms part of the aircraft. As to claims 2,12 and 25 such claims are considered to be product by process claims as to the plastics being injection molded and further, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the body from well known plastic material as plastic is known to be lighter and hence more desirable in aircraft connections and since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

Claims 1,6,7,17-19,20,23,24 and 31-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,924,744 to Eberle in view of U.S. patent 3,494,641 to Caregnato. The Eberle air flow aircraft connector teaches a body 72 having an integrated bearing structure 84. A first member 64 pivotably coupled to the body via the bearing pins 84 and being at least partially supported by the integrated bearing structure and a second member 32 coupled to the first member 64 via a camming surface formed by the pin and link 48,74 of which the link includes a slot or hole in which the pin 48 extends, the slot or hole being arcuate, wherein pivotal actuation of the first member directs axial translation of the second member 32 from a first position (fig. 5) to a second position (fig. 5B). However, the Eberle first pivotal member 64 of the connector does not pivot in a direction tangential to the body. Caregnato discloses that it is known in the art to provide a similar type coupling with body 201, first member 13 tangentially pivoted to the body at 11 and second member 10 connected to the first member at 9 to connect two flow members 2 and 3. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the first member of Eberle to pivot tangentially to the body via orientation of the pivot pin 84 to be perpendicular to the body axis such as taught by Caregnato, since both connectors are equivalent in the manner of operation and relocation of the pivot pin causing tangential movement of the first member would allow the first member to not extend too far out away from the body and thereby operate in a more flush and sleek manner. As to claim 6 see fig. 5 which shows clamping portion 90 of the second member. As to claim 20 see aircraft air conduit 30 and column 1, lines 10-15. As to claim 24, see seal 34 in fig. 1.

Allowable Subject Matter

Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 26-30 are allowable over the prior art of record.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Nicholson whose telephone number is (703) 308-0829. The examiner can normally be reached on Tuesdays thru Fridays from 7:30 to 6:00.

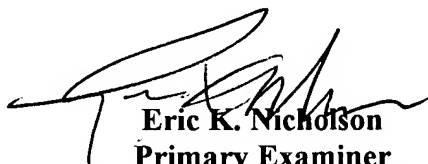
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne, can be reached on (703) 308-1159. The fax phone number for Technology Center 3600 is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center receptionist whose telephone number is (703) 308-1113.

ekn
2/26/04
W@H



Eric K. Nicholson
Primary Examiner
Technology Center 3600